

ABSTRACT

A high frequency module for transmitting and receiving, for example, communication signals of GSM/DCS/PCS/WCDMA systems through a single antenna is provided at a relatively small size and low cost.

The high frequency module includes a diplexer (DiPX2) for separating communication signals from the antenna into GSM communication signals in lower frequency bands and PCS/ DCS/WCDMA communication signals in higher frequency bands, a diode switch circuit (SW1) that is connected to a input and output terminal (P21) of the GSM communication signal of the diplexer (DiPX2) and is for switching transmission and reception of the GSM communication signal, and a multipoint GaAsIC switch (GaAsSW) that is connected to the GSM/DCS/PCS/WCDMA communication signals of the diplexer (DiPX2) and is for switching transmission and reception of these signals. The high frequency module switches the four types of communication signals by changing the patterns of controls signals VcG, VC1, and Vc2 that are applied to the diode switch circuit (SW1) and the GaAsIC switch (GaAsSW).